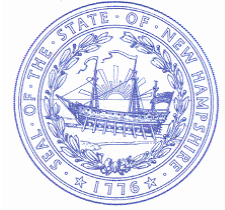




The State of New Hampshire
Department of Environmental Services

Thomas S. Burack, Commissioner



October 30, 2008

His Excellency, Governor John H. Lynch
State House
Concord, New Hampshire 03301

Subject: **Triennial Report on New Hampshire's Capacity Development Program for
Public Water Systems – Oct 2005 to Sept 2008**

Dear Governor Lynch:

We are submitting to you, pursuant to Section 1420 (c) of the 1996 Amendments to the Safe Drinking Water Act, New Hampshire's Capacity Development Program report for activities completed between Oct 2005 and Sept 2008 (FY06-08).

New Hampshire's capacity assurance program is focused on very small water systems serving fewer than 250 persons. These systems represent 74 percent of our community water supplies and incur 77 percent of our health based and monitoring and reporting violations. Although they have a much smaller revenue base and volunteer management boards, small systems must meet the same standards of quality and operations as larger systems. The capacity assurance program provides free, tailored assistance and training to help these very small systems to become more self-reliant and comply with the ever-increasing requirements of the Safe Drinking Water Act. The enclosed report details various financial, managerial and technical assistance programs and tracking measures developed by New Hampshire to address these needs. It is formatted to meet the requirements for federal reporting.

Please contact our Drinking Water Bureau Administrator, Sarah Pillsbury, at (603) 271-1168 or Sarah.Pillsbury@des.nh.gov with any questions or additional information about New Hampshire's Drinking Water Program and DES's efforts to improve the capacity of small public water systems.

Sincerely,

Original signed by,

Thomas S. Burack
Commissioner

Encl.

cc. Harry Stewart, P.E., Director, Water Division
Sarah Pillsbury, P.G., Administrator, Drinking Water and Groundwater Bureau

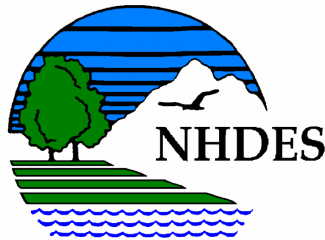
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NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas Burack, Commissioner
Michael Walls, Assistant Commissioner
Harry Stewart, Director, Water Division

**TRIENNIAL REPORT TO THE GOVERNOR &
EPA ON NEW HAMPSHIRE'S CAPACITY
DEVELOPMENT PROGRAM
FOR PUBLIC WATER SYSTEMS**

October 2005 to September 2008
- with highlights for FY08 -



Prepared by:

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September 30, 2008

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I. INTRODUCTION

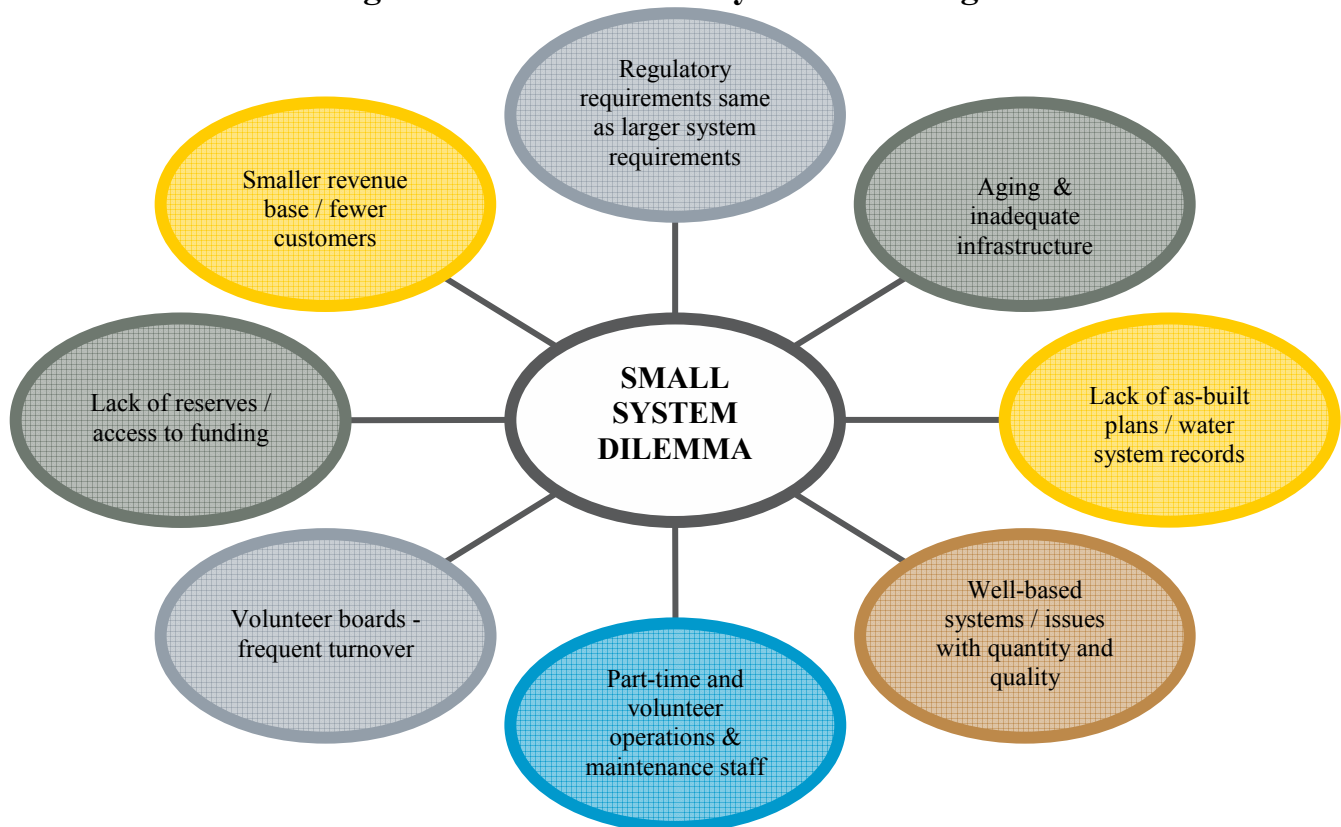
1. BACKGROUND

Under the 1996 Amendments to the Safe Drinking Water Act (SDWA), Section 1420(c), states must develop, implement, measure, and report on their *capacity assurance* efforts to ensure that all new and existing public water systems (PWS) have adequate technical, managerial and financial means to provide clean, safe and reliable water. States failing to comply with these requirements are subject to withholding of up to 20 percent of their Drinking Water State Revolving Fund allotment.

The overall goal of capacity assurance is to improve the rate of compliance and long-term sustainability of water systems. New Hampshire's program is administered through the DES Drinking Water and Groundwater Bureau (DWGB). It is focused on water systems serving communities fewer than 250 people, because they have the greatest challenge in meeting the public health and reporting requirements of the SDWA. Figure 1 depicts the common hardships faced by our small water systems today.

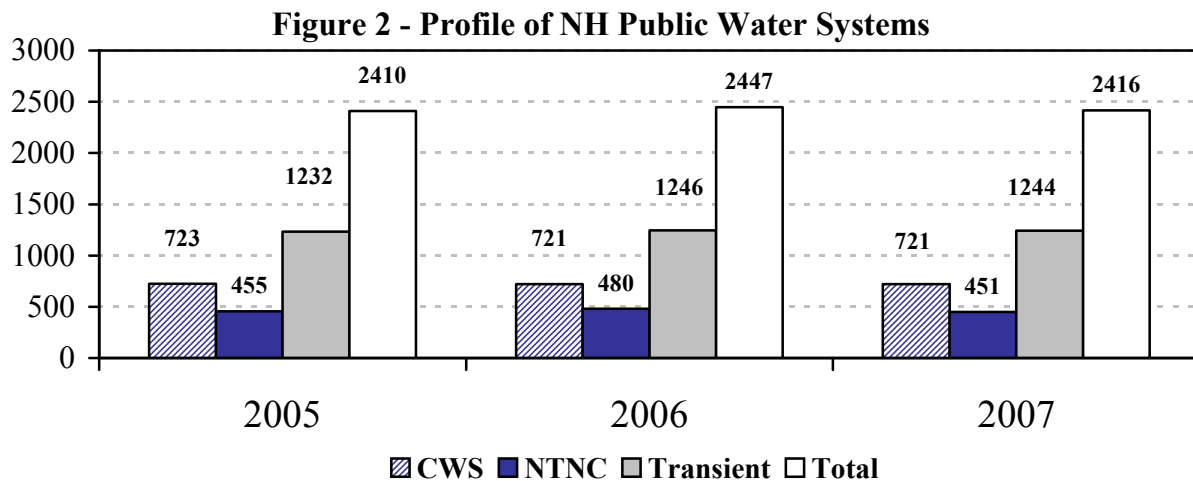
This report is structured in accordance with reporting criteria developed by EPA under its 2006-2011 Strategic Plan Goal 2: *Clean and Safe Water*. These criteria were developed to establish consistent reporting between the States. Our activities for this reporting period include training seminars, meetings, site visits, financial and technical assistance, an As-Built Plan initiative, website improvements and rule revisions. Capacity activities for this reporting period are organized under activities for *new* PWS (Section II) and for *existing* PWS (Section III).

Figure 1 – Small Water System Challenges

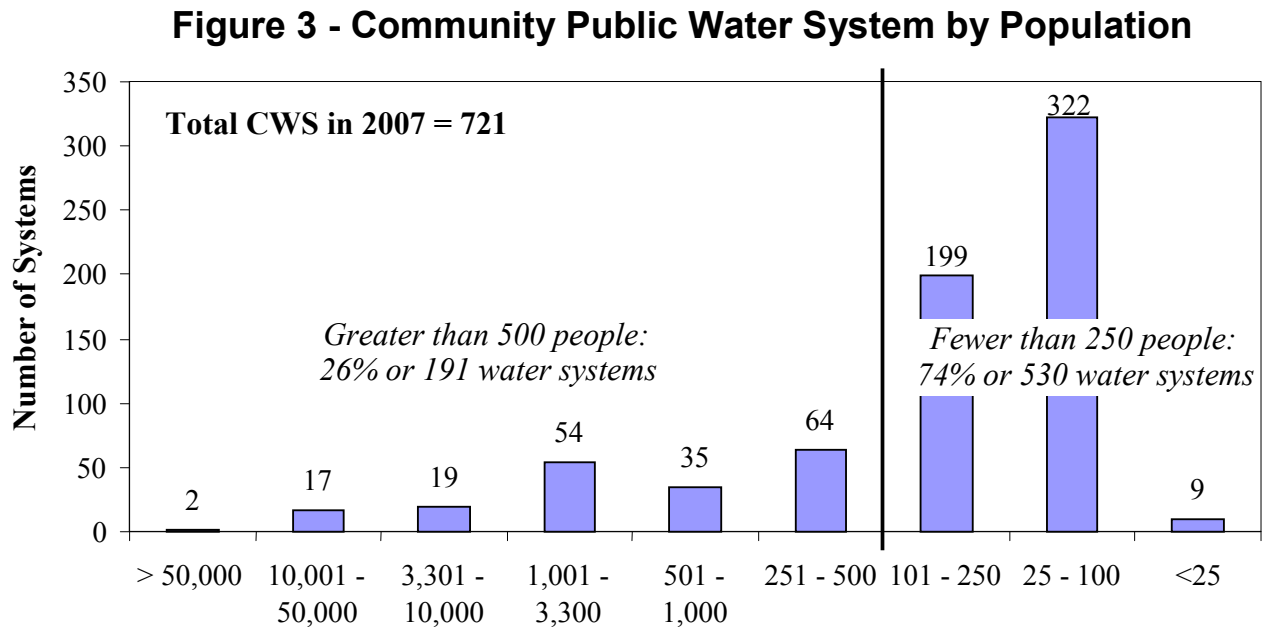


2. PROFILE OF NEW HAMPSHIRE PUBLIC WATER SYSTEMS

The capacity assurance program applies to all non-transient water systems, including residential (community) as well as schools and businesses (non-community, non-transient). The state regulates approximately **2,416** PWS (2007 data, Figure 2). About **64 percent** of the total state population of over 1.3 million (Office of State Planning 2007 estimate) are served by community public water systems. The remaining **36 percent** of New Hampshire's population obtains their water from private wells that are not regulated by the state or federal SDWA. Note that regulations for transient systems (restaurants, hotels), are limited and capacity improvements for these systems are not covered in this report.



About 74 percent of New Hampshire's community PWS are very small, serving fewer than 250 people (Figure 3). These systems are the main target of New Hampshire's capacity assistance efforts because of their higher rate of non-compliance. Based on the past three years of enforcement records, **77 percent of the violations** issued by the state are directed to community water systems serving fewer than 250 people.



II. CAPACITY ASSURANCE FOR NEW SYSTEMS

From their inception, new public water systems must have adequate technical, financial and managerial resources to ensure their long-term sustainability and reliability. The capacity assurance program for new systems includes regulatory requirements and control points to verify that new approvals are issued only to systems that have demonstrated these capabilities.

1. CHANGES IN STATE REGULATIONS FOR CAPACITY ASSURANCE

As part of the eight-year review and re-adoption cycle for New Hampshire Administrative Rules, existing capacity assurance rules were revised and readopted (Env-Dw 601 and Env-Dw 602, Capacity Assurance for existing and new public water systems, respectively). The main changes for new systems were:

- Change of the preliminary business plan submittal to coincide with the technical design approval (after installation of the well), to provide better construction cost projections based on known water quality and quantity needs.
- Requirement to provide an initial asset inventory and annual disclosure of water rates.

2. MODIFICATIONS TO THE STATE'S CONTROL POINTS FOR CAPACITY ASSURANCE

New Hampshire's main control point for capacity assurance is the water system **Business Plan**. The business plan is a tool for the system to document its managerial and financial assets, to improve its ability to provide effective and reliable service to its customers over the long term. With re-adoption of the capacity assurance rules, the business plan template for new systems was revised to include the water system asset inventory, budget, organization chart and a water rate notice. The business plan templates are available on our Small Systems Help Center webpage.

3. NEW PWS APPROVALS VS. SIGNIFICANT NON-COMPLIERS LISTS

On average, about eight new non-transient water systems are approved each year (Fig 4). New PWS approved over the past three years (FY06 – FY08) are identified below. One measure of the new systems program is that none of these systems have been cited on the federal Significant Non-Compliers (SNC) list, for systems with repeated violations.

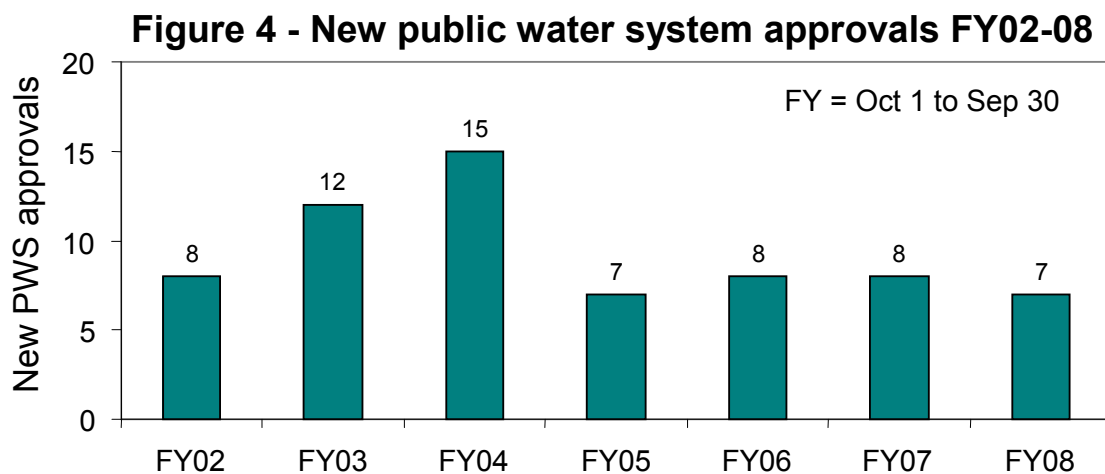


Table 1 - New PWS Approved October 1, 2005 to September 30, 2008

	EPA ID	Town	Public Water System Name	Type
FY08– October 1, 2007 to September 30, 2008				
1	DR999002	ALBANY	WHITE MOUNTAIN WALDORF SCH	NTNC
2	DR998179	BRADFORD	NFI NORTH SCHOOL	NTNC
3	DR999043	HAMPSTEAD	KGW LLC	NTNC
4	NH1176040	HOLLIS	TECHNOLOGY GARDEN	NTNC
5	DR997096	PELHAM	VIRGINIA WOODS	CWS
6	DR996061	PLAISTOW	CHANDLER AVE ADULT LIVING	CWS
7	DR997089	WINDHAM	WINDHAM HIGH SCHOOL	NTNC
FY07 – October 1, 2006 to September 30, 2007				
1	NH0052010	ALSTEAD	ALSTEAD SR HOUSING	CWS
2	NH0115060	ATKINSON	BROOKSTONE PARK DAYCARE	NTNC
3	NH1402020	LOUDON	VILLAGES AT LOUDON	CWS
4	NH1435050	LYME	LYME NURSERY SCHOOL	NTNC
5	NH2082100	SANDOWN	AUTUMN HILLS	CWS
6	NH2302050	SWANZEY	FOREST VIEW ESTATES	CWS
7	NH2495040	WESTMORELAND	LILY GARDEN LRNG CTR	NTNC
8	NH2545090	WINDHAM	WINDHAM KINDERGARTEN	NTNC
FY06 – October 1, 2005 to September 30, 2006				
1	NH0955030	GRANTHAM	TURTLE MOUNTAIN SCHOOL	NTNC
2	NH1275060	KINGSTON	SANBORN REGIONAL HS	NTNC
3	NH1296010	LANCASTER	EASTER SEALS FACILITY	NTNC
4	NH1792050	NORTHWOOD	THE MEADOW AT NORTHWOOD	CWS
5	NH1795050	NORTHWOOD	OZ LAND EARLY LRNG CTR	NTNC
6	NH1805060	NOTTINGHAM	ALL ABOARD PRE-SCHOOL	NTNC
7	NH1852090	PELHAM	SIMPSON MILL ROAD	CWS
8	NH2082090	SANDOWN	WATERFORD VILLAGE ESTATES	CWS

Type

CWS = community public water system

NTNC = Non-transient non-community public water system

III. CAPACITY ASSURANCE FOR EXISTING PWS

This section describes the different assistance programs administered by the DWGB to improve the capacity of **existing** PWS, including general outreach activities, prioritization of systems in need of assistance, and review of the program needs and strategies for improvement for the next reporting period. Highlights of activities performed in FY08 are listed with trends reported for the past three years.

1. PROGRAMS, TOOLS, AND ACTIVITIES TO ASSIST EXISTING SYSTEMS

Activities targeted to improve the capacity of *all* existing water systems in FY08 included the following:

(a) Source Water Protection & Emergency Preparedness Assistance

- Trained 154 water suppliers, local officials, regional planners, and consultants at our annual Source Water Protection Workshop, co-sponsored by DES and the American Ground Water Trust and held at the New Hampshire Technical Institute in Concord.
- Conducted 39 source water protection outreach events throughout the state.
- Provided individual technical assistance to the towns of Ashland, Fitzwilliam, Mason, Raymond, Rindge, Richmond and Stoddard.
- Trained 35 municipal employees to conduct inspections and enforce best management practice regulations for handling and storing regulated substances.
- Trained and certified 27 water system representatives in the National Incident Management System (NIMS) and Incident Command System (ICS) programs.
- Developed the NHWARN (Water and Wastewater Agency Response Network) program, which is a mutual aid program for water and wastewater systems. The NHWARN program was placed within the current and successful Public Works Mutual Aid Program. Currently the program is only available to municipal water systems. The ability of private water systems to join the program is being investigated by the Attorney General's office. So far 31 water systems have joined the program.
- Worked with sanitary survey staff to provide assistance to water systems with source capacity deficiencies. Surveyors fill out a source vulnerability questionnaire (implemented in 2007), to identify water shortages or bulk water hauling that may have occurred since the last system visit. If so, the system is added to the capacity assistance list for follow up by source water protection technical staff.
- Continued outreach for emergency planning and security through newsletters, mass e-mails, direct mailings, and presentations at water works meetings.
- Provided 17 Local Source Water Protection Grants for a total of \$191,044.
- Provided 21 Businesses United for Water Security grants for a total of \$75,074. This is a pilot program between DES and EPA, which awards up to \$4,500 for installation costs associated with security improvements for public water systems, including generators, fencing, gates and alarms.
- Provided Source Water Land Protection Grants for a total of \$542,750 to Concord, Dover, Hooksett, Jaffrey, Lebanon, Lee, Newmarket, and Rochester water systems, to permanently protect 593 acres of land in their source water protection areas.

(b) Water System Regionalization Assistance

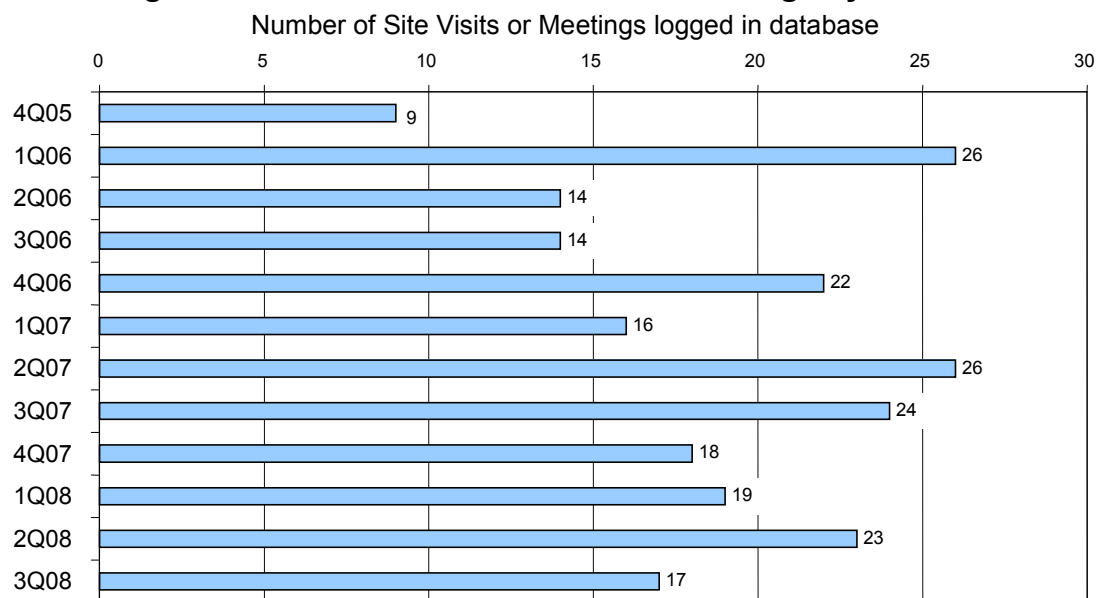
Interconnection is a key tool to aid struggling small water systems, because larger water utilities are better able to manage their systems both financially and technically. In FY08, grant programs to support water system regionalization efforts included:

- Grants totaling \$150,000 for the State Interconnection and Groundwater Investigation (SIGI) program, for reimbursement of 25 percent of costs for planning, design and construction leading to interconnection of two or more PWS.
- Funding for two interconnection study grants for interconnection of ten communities in Southern and Central New Hampshire.

(c) Engineering and Hydrogeology Technical Assistance

DWGB engineers and hydrogeologists provide ongoing assistance in new rule implementation and compliance. Extra effort is required to assist very small water systems with limited funding for specialized consultants. Activities include attendance at board meetings, technical assistance site visits, troubleshooting bacteria, nitrate, lead and copper, arsenic and uranium water quality violations, and developing new well sources to replace lost capacity or address problem sources. Quarterly technical assistance site visits and meetings attended by DWGB staff for FY06 to FY08 are shown in Figure 5. These site visits are *in addition* to regular sanitary surveys, permitting inspections, and special investigations performed by DWGB technical staff.

Fig 5 - Technical Assistance Visits & Meetings by DWGB Staff



(d) As-Built Drawings Initiative

On June 23, 2008, DES held a roundtable discussion with over a dozen small system stakeholders, to discuss the need for as-built drawings, for both new and existing systems. The Fall 2008 issue of DES “Supply Lines” newsletter dedicated the front page to communicate this important message, including a timeline for systems to develop these plans.

Beginning April 1, 2009, sanitary surveys and emergency plan updates will begin to cite the lack of as-built drawings as a minor deficiency. This will help motivate systems to work with their operators to develop their record drawings in time for the next sanitary survey cycle in three years (community systems), or five years (non-community systems) when it will be cited as a significant deficiency. Also, starting with the 2009 construction season, new systems will not receive DES final approval or an EPA ID unless an as-built drawing is submitted.

(e) Technical Assistance Subcontractors

For the past decade, DES has used the 2 percent set-aside funds to contract technical assistance services for general technical, managerial and/or financial assistance to small water systems. In FY08, we contracted with Northeast Engineering PLLC and Granite State Rural Water Association (GSRWA). Contractors work independently with individual water systems to address specific needs, and report to DES at least monthly on their progress or lack thereof.

Our contract with Northeast Engineering, PLLC, was extended from FY07 (February 2007 start) to June 2008. The total invoiced amount was **\$42,690** for 716 project hours and assistance to 28 very small water systems for help with uranium, bacteria and corrosion control water quality issues. The top systems with respect to hours of service are listed below, with a full listing included as Exhibit A. Assistance included identifying and preparing conceptual cost estimates for various compliance options to assist water system board members to decide the best options to address their water needs.

Table 2 – Top Technical Assistance Systems Serviced by Northeast Engineering

	TOWN	EPA ID	PWS NAME	Assistance Type
1	New Durham	1672020	Copple Crown Village District	Uranium + bacteria
2	Conway	0512250	Saco Woods	Uranium
3	Conway	0512260	Davis Hill	Uranium
4	Conway	0512120	Saco River Forest	Uranium
5	Stewartstown	2191020	West Stewartstown Water Precinct	Copper Corrosion, Bacteria
6	Bartlett	0162070	Linderhof Golf Course	Pumphouse improvements
7	Unity	2384010	Sullivan County Home	Well controls
8	Campton	0342010	Beebe River	Disinfection
9	Alstead	0053010	Well Hill Coop	Funding, Manganese
10	Surry	2281010	Surry Village Water Company	Copper Corrosion Control

Our second contract for FY08 was with GSRWA for **\$85,475**, for one full-time equivalent assistance for 12 months. Under this contract, 90 small water systems were visited and contacts were made to an additional 11, to assist with bacteria and leak detection problems. Of these, 40 percent were transient water systems such as campgrounds and small convenience stores, while 60 percent were very small community water systems such as mobile home parks. The top systems with respect to hours of service are listed below, with a full summary included as Exhibit A.

Table 3 – Top Technical Assistance Systems Serviced by GRSWA

	TOWN	EPA ID	PWS NAME	Assistance Type
1	Allenstown	0043040	Catamount Hill MHP	Bacteria, Lk Detection, Pump test
2	Bartlett	0161010	Bartlett Village Precinct	Leak Detection
3	Haverhill	1101050	Mountain Lakes	Leak Detection
4	Salem	2057080	Camp Otter	Bacteria
5	Thornton	2342110	Millsbrook Village	Leak Detection, Bacteria
6	Meredith	1522010	Patrician Shores	Leak Detection / pipe locating
7	Ashland	0102010	Ropewalk Services (Cold Spring Mtn Club)	Leak Detection
8	Haverhill	1101040	Woodsville W&L	Leak Detection
9	Deerfield	0598020	Blue Bowl Variety	Bacteria
10	Piermont	1885010	Piermont Village School	Bacteria

(f) Leak Detection Assistance

As part of our FY08 contract with GRSWA, 47 water systems received assistance for identifying leaks in aging distribution piping and service connections. Oversight of the leak detection portion of this contract was provided by DES Water Conservation/Water Use Registration program staff. Of these, 31 identified and corrected leaks quantified at **280 gpm** total loss rate. The remaining 16 systems received assistance relative to pipe and valve locating.

(g) Water Conservation Outreach

In July 2002, RSA 485:61 was signed into law requiring DES to adopt and administer rules for water conservation practices in New Hampshire. Env-Ws 390 Water Conservation Rules were adopted in May 2005 to implement the statute and help ensure the sustainability and wise use of New Hampshire's water resources. The rules require applicants for new water sources to develop conservation plans that outline specific water efficiency initiatives and schedules for implementation. A new staff position was created in late 2006 to manage this program for DES. Outreach activities performed in the past two years are:

- Formalized DES partnership with EPA WaterSense to promote water efficiency and water efficient products in New Hampshire (May 2007).
- Ongoing presentations on water conservation for various outreach forums, including New Hampshire's Source Water Protection Advisory Committee (June 2007), New England Water Works Association annual conservation workshop (April 2008), and DES Drinking Water Source Protection Workshop (May 2008).
- Provided presentations for Granite State Rural Water Association's meeting with the Association of Water Village Districts titled "Water Conservation for Utilities" (Dec 2007), as well as the Annual Field Day for water system operators titled "Water Conservation, Rules & Tools" (Sept 2008).
- Attended meetings / provided presentations to small water system homeowners associations on smart irrigation practices and water efficiency opportunities, in Stratham and Moultonborough.
- Published quarterly newsletter articles since 2007 for various DES publications "DES

partners with EPA's WaterSense" (partnership and benefits of this program), "We're in Hot Water" (water efficiency, water conservation, and the energy/water nexus), "WaterSense Points Consumers to Products that Save Water" (recruiting water systems to partner with WaterSense), "Addressing the Impacts of Lawn Irrigation" (including model ordinances for prudent irrigation practices).

- Performed water audit of Mt Washington Summit facility to identify water conservation opportunities for assistance with wastewater permitting issues (Feb 2008).
- Assisted Hampstead Area Water Company with performing water audits of public buildings in the Hampton/North Hampton area (Mar 2008).
- Organized water conservation/WaterSense display for Wild New Hampshire Day at New Hampshire Fish & Game headquarters (April 2008).
- Sent mass mail invitations to all community water systems to participate in conference calls with DES to learn about partnering with WaterSense (March and May 2008)
- Prepared request for proposal and provided oversight of contractor for completion of water efficient bathroom retrofit for four first floor bathrooms at DES 29 Hazen Drive offices, to showcase water and energy conservation with visitors and employees (June 2008). Prepared and posted flyers with summary of water and cost savings achieved. "Flushed with excitement, DES makes water efficiency upgrades" article published in DES newsletter. Anticipated savings are projected at 500,000 gallons of water per year and \$4,500 annually in water, sewer, and energy costs.
- Interviewed live for New Hampshire Public Radio's The Exchange series on drinking water. The hour long radio program focused on water use in New Hampshire and included references to opportunities for efficiency and conservation (July 2008).

(h) Operator Training

The Operator Certification program funded a number of outreach and training activities through the Operator Expense Reimbursement Grant, to advance the skill and knowledge of small water system operators and board members. Highlights for FY08 included:

1. Contract for **\$63,420** to the New Hampshire Water Works Association to:
 - Organize and oversee the 2007 Annual NH Drinking Water Exposition, held in Manchester, featuring 23 technical seminars (four parallel sessions) by engineering consultants, water industry professionals and DES drinking water bureau staff. This event is our main opportunity for outreach to very small system operators as it regularly attracts attendance by over 250 drinking water operators.
 - Provide a 13-week advanced operator training course for drinking water operators of PWSs serving between 500 and 3,300 people. Approximately 25 operators including DES's Small System Ombudsman attended this training.
 - Provide eight training seminars and a drinking water math course targeted to operators of PWS serving fewer than 3,300 people. Between 25 to 50 operators attended each of these sessions.
 - Provide two training small system operator courses (spring and fall) and eight continuing education seminars for operators of very small PWS (fewer than 500 people). All new DES drinking water bureau staff are required to attend this class.
2. Contract for **\$28,750** to New England Water Works Association to provide 20 full and/or half day classes to water system operators at the DES Franklin Training Facility. Most of these achieved full or near full the 25-person registration limit.

3. Contract for **\$10,780** with RCAP Solutions Inc to perform an additional 10 training seminars for board member training using the training materials developed in 2006 – 2007. This training is targeted to systems serving fewer than 3,300 people. Topics include: introduction to the SDWA, PWS by-laws, responsibilities, asset management, sustainability and self-assessment, budgeting and resources.
4. Support to other DWGB programs by organizing training seminars for certified operators and owners of small public water systems. This fiscal year included training on fluoride and Stage 2 IDSE / LT2.
5. Contract with the North East Interstate Water Pollution Control Commission to develop and reproduce 5,000 brochures titled “A Business Owner’s Guide to Complying with NH State Drinking Water Rules”, a how-to guide on sampling, testing and shock-disinfection for transient non-community water systems.
6. Outreach table for the Granite State Rural Water Association Operator Field Day (Sept. 2008). DES Drinking Water staff also participated in a roundtable forum on drinking water regulations and provided training on water conservation.

(i) Small Public Water Supply Help Center

As part of an agency-wide web make-over in spring 2008, the Capacity Assurance program re-designed and updated its technical assistance page to better serve our small water systems. The general layout was re-designed to improve navigation and organization of topics. The Small Public Water Supply Help Center (<http://des.nh.gov/organization/divisions/water/dwgb/capacity/index.htm>) provides fact sheets and guidance to help small systems with the most pressing compliance issues, including:

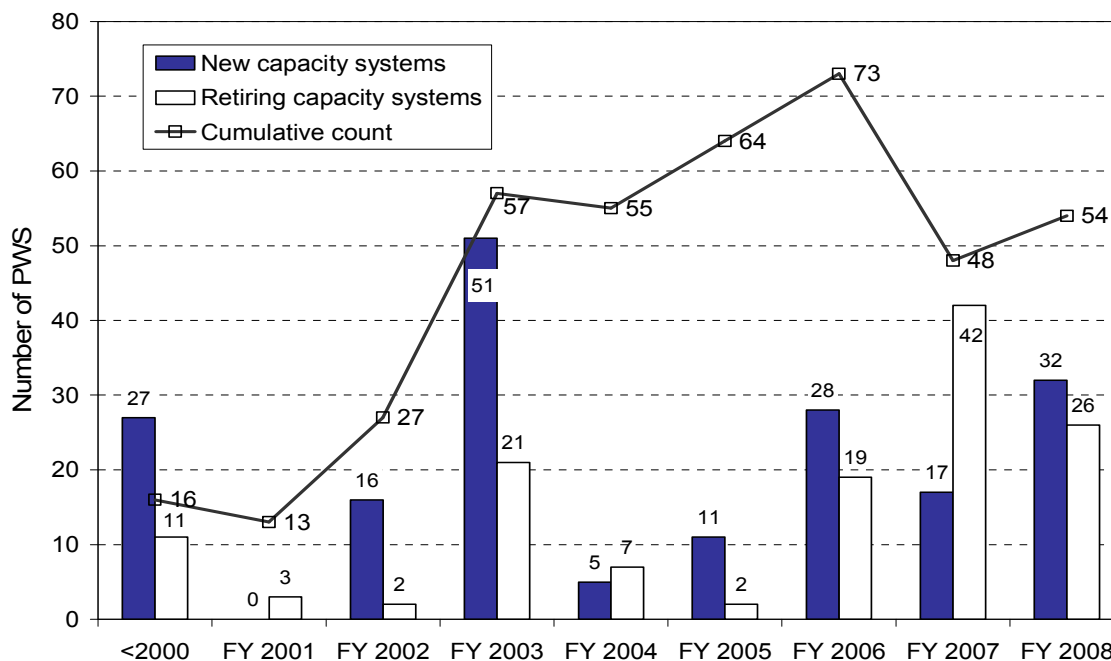
- State and federal grants and loans funding resources for public water systems.
- Compliance help for new rules and common contaminants in New Hampshire, such as arsenic, radionuclides, disinfection byproducts and groundwater disinfection.
- Ongoing training for water system board members and operators.
- Business plan asset inventory and water system budget templates.
- Sustainability fact sheet and self-assessment checklists.
- Links to EPA Safewater and EPA Small Systems compliance help.

The number of website visits will be tracked and reported in subsequent program reports as part of our annual progress reports.

2. IDENTIFICATION AND PRIORITIZATION OF SYSTEMS IN NEED OF ASSISTANCE

Systems in need of tailored assistance through the capacity development program are identified through our regular interactions including sanitary surveys, referrals from contract operators, direct requests from the water system, customer complaints, and repeat enforcement and significant non-complier lists. At the close of FY08, **54** systems were being assisted and tracked in this program (Figure 6).

Fig 6 - Existing PWS in Capacity Development Program



For each capacity development system, a tailored work plan is developed and updated at least monthly to serve as a roadmap in identifying, evaluating and addressing the water system needs. An in-house project manager is assigned to be the work plan lead. The active “capacity system” list is maintained as an on-line task log in Microsoft Outlook, accessible internally to all DWGB staff for review and additional log entries. Progress (or lack thereof) is discussed at monthly meetings attended by the bureau administrator and technical staff. Where needed, the administrator personally attends meetings with water system commissioners or board members to review the deficiencies and agree on a suitable work plan and timeline for resolution. The work plan log is closed when the project manager deems that the system has become more self-sufficient such that active assistance is no longer necessary. Upon close-out, a chronological summary of the assistance provided is filed with the system correspondence file.

As part of the state’s new capacity assurance rules adopted March 2008, the deficiency schedule for existing systems (Table 4) was updated to better rank the needs of systems referred to the capacity program. Systems with a deficiency rating greater than 25 points can be required to prepare and submit a water system business plan in addition to addressing any outstanding water quality, quantity or infrastructure violations.

Table 4 - Env-601 Deficiency Schedule for Capacity Assurance (adopted Mar 2008)

Area, Deficiency	Deficiency Points
Inadequate source water capacity	15
Inadequate infrastructure (flooding, electrical, mechanical equipment), per deficiency	10
Significant deficiencies, per deficiency	10
Maximum Contaminant Levels, per violation	10
Lack of certified operator	10
Monitoring and reporting or Public Notice, per violation	10

3. NON-COMPLIANCE TRENDS

Although New Hampshire boasts a compliance rate of over 83 percent of community water systems *without* any health-based violations (EPA SDWISFED Rolling GPRA, Oct 1, 2008), a review of the remaining 17 percent shows that community systems serving fewer than 250 people are the worst offenders (Table 5).

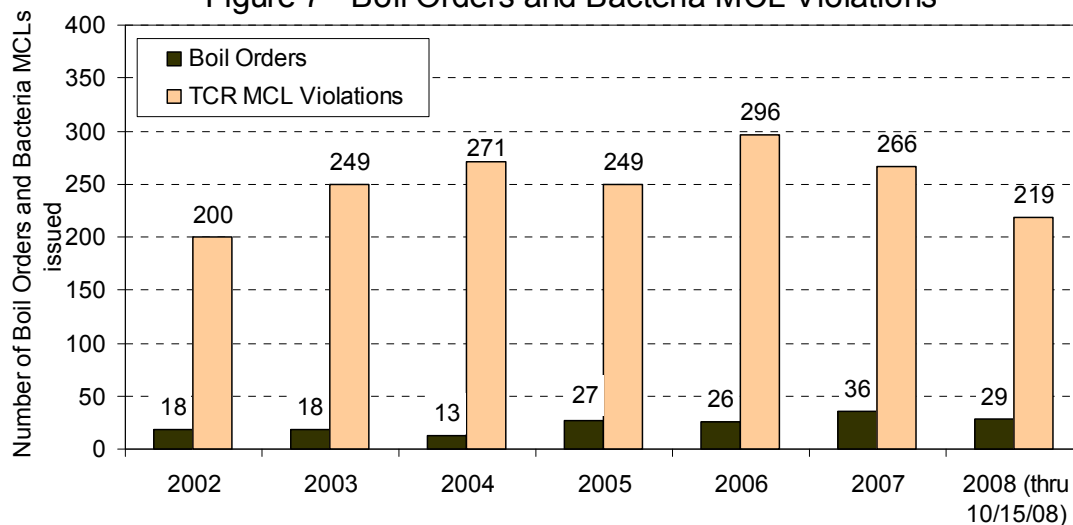
Table 5 - SDWA Violations at NH Community Water Systems

	Number of Health Based Violations to CWS		Number of Monitoring and Reporting Violations to CWS	
	CWS < 250	Total violations	CWS < 250	Total violations
FY06	447 (76%)	587	267 (73%)	366
FY07	372 (76%)	485	271 (75%)	359
FY08*	205 (79%)	261	102 (97%)	105

* Issued thru 10/15/08

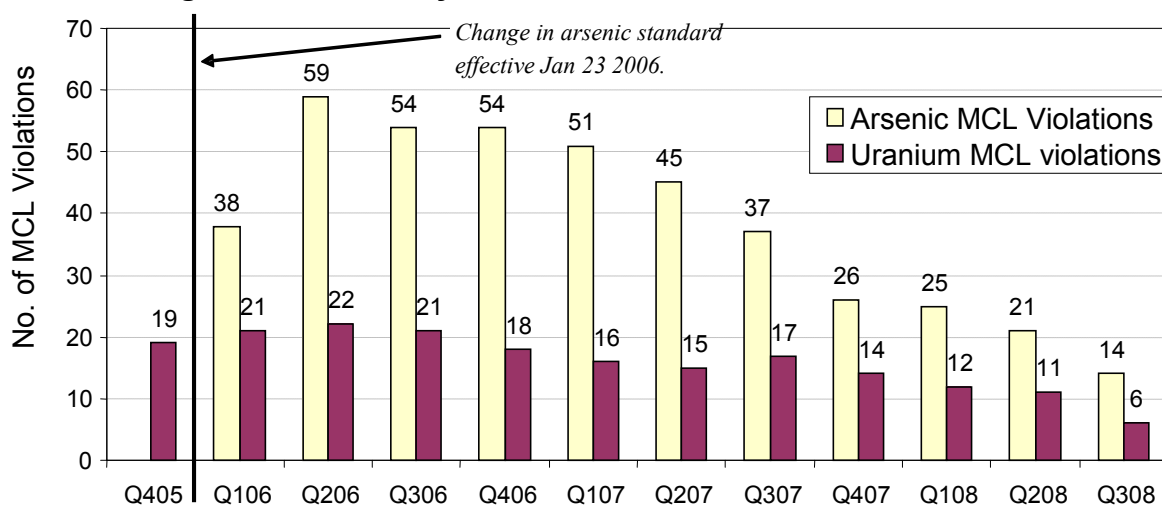
Since at least 2004, the capacity program compliance priorities have focused on health-based violations for **bacteria, arsenic and uranium**. Between 200 to 300 bacteria MCL violations are issued each year in New Hampshire (Figure 7), the majority of which are issued to systems serving fewer than 250 people. Based on this and in preparation for the new Groundwater Rule, which applies to all community and non-community systems using groundwater, a simple step by step guide for addressing bacteria contamination was developed in Spring 2008, and is included with all bacteria enforcement notices to non-community systems. Outreach to these systems will be a priority in FY09, prior to the effective date of December 1, 2009 for the new Groundwater Rule requirements.

Figure 7 - Boil Orders and Bacteria MCL Violations



Similarly, implementation of the new arsenic and uranium standards have demanded extensive outreach from DWGB staff to water system boards and operators. Beginning in January 2004 (state adoption of the new federal arsenic standard), DWGB issued letters to all systems with arsenic detections above 10 ppb to alert them of the effective compliance date of January 2006. Over 200 small water systems were impacted by the change of arsenic standard, while approximately 40 systems were impacted by the new uranium standard. Compliance progress has been achieved by parallel enforcement and technical assistance, and close cooperation between these two programs in the Bureau. As such, at the close of FY08 only 14 of 200 systems remain with water above 10 ppb arsenic, and six of 40 uranium systems remain above 30 ppb uranium (Figure 8). All continue under active enforcement and continue to demonstrate progress toward compliance. The non-compliant systems are mostly large (greater than 500 population), addressing major upgrades and funding challenges including the need for additional source capacity, storage and control upgrades, and voter approval to borrow funds.

Figure 8 - Quarterly Arsenic & Uranium Violations FY06 - FY08



4. STATEWIDE CAPACITY CONCERNS OR NEEDS IDENTIFIED THIS PERIOD

The need for additional DES staff to provide direct assistance, training and oversight of the state's capacity development program was identified in FY07. A new Small Systems Ombudsman joined the bureau in January 2008 to fulfill this need. The ombudsman's focus is on providing managerial and funding assistance to very small systems, working directly with water system board members, operators and small system contractors. This direct assistance to the small systems has reduced the need to subcontract these services, and provides capability to better assess technical assistance needs. Accordingly, DES will not be issuing a request for proposals for general technical assistance contractors for FY09. However, the need for specialized contract services such as leak detection, as-built drawings, water and energy audits, etc., will be considered in January 2009.

EPA's National Capacity Development Strategic Plan (Jan 2008) provided guidance for states to better align our technical assistance efforts and provide more comparable tracking measures amongst the states. Common measures for the effectiveness of state

capacity development programs will now include the number of existing systems assessed for capacity assistance, reduction in significant non-compliance (SNC) systems, and reduction in the number of long-term health-based violations. New Hampshire has been using these measures qualitatively up to now, but will incorporate them in our strategy moving forward as detailed in Section 6 – Modifications to existing systems strategy.

5. STATEWIDE REVIEW OF IMPLEMENTATION PROGRESS

Quarterly review of the capacity program implementation progress is performed by a number of measures reported through the statewide Measures Tracking and Reporting System (MTRS). Current quarterly tracking measures are:

- Number of TA site visits by DWGB staff
- Number of new systems added to the active capacity development list
- Number of systems retired from the capacity development program

Annual review of the program progress is provided via our annual reports to EPA, and triennial reports to the Governor. In addition, this reporting period included review and approval of new Capacity Assurance Rules Env-Dw 601 and 602 in March 2008 by the 12-member, independent Water Board Council, and the Joint Legislative Committee on Rules. External stakeholders also provided input to improve the structure of the program.

6. MODIFICATIONS TO THE EXISTING SYSTEMS CAPACITY DEVELOPMENT STRATEGY

Modifications to the existing systems strategy for the following reporting period are proposed as follows:

- a) Addition of new quarterly tracking measures including:
 - Number of historical significant non-compliance systems (as reported by EPA).
 - Percent of health-based violations to water systems serving fewer than 250 persons.
 - Percent of monitoring and reporting violations to water systems serving fewer than 250 persons and by water system type (CWS, NTNC and TNC).
 - Number of visits to Small System Help Center / Capacity Assurance webpage.
- b) Redirection of contracted technical assistance services to address specific needs, such as leak detection, preparation of as-built drawings or water and energy audits.
- c) Improved alignment of technical assistance efforts with state enforcement priorities.
- d) Additional operations training for very small water systems to prevent bacteria violations in preparation for the Groundwater Rule.

**NEW HAMPSHIRE'S CAPACITY
DEVELOPMENT PROGRAM FOR PUBLIC
WATER SYSTEMS**

September 30, 2008

Exhibit A

Contractor Project Hours

2% Set-Asides Technical Assistance Contracts

1. Granite State Rural Water Association
2. Northeast Engineering, PLLC

FY08 TECHNICAL ASSISTANCE CONTRACT - GRANITE STATE RURAL WATER

			BACTERIA + LEAK DETECTION TECHNICAL ASSISTANCE HOURS													% of total
TOWN	EPA #	SYSTEM NAME	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL	
% Allocated (target 85%)			59%	45%	52%	65%	41%	47%	80%	64%	76%	83%	59%	76%		62%
		Admin / Holiday / Sick	66.5	95	81	65	101	96	27.5	63	40.5	32	71	45	781	38%
Allenstown	0043020	Old Towne MHP				16	5.5								21.5	1.0%
Allenstown	0043040	Catamount Hill MHP				8	25.5	11.5	17	5.5	0.5	11.25	0.5	2	81.75	4.0%
Alton	0062010	Eagles Nest MHP								0.5					0.5	0.0%
Ashland	0102010	Ropewalk Services									0.5	28.75			29.25	1.4%
Atkinson	0112060	Commons of Atkinson				8		2	8						18	0.9%
Bartlett	0161010	Bartlett Village Prec										12	45.5	16.5	74	3.6%
Bath	0177010	Twin Rivers Campgrnd	4.5												4.5	0.2%
Bedford	0198060	Hill Brook Motel					8		8.5					0.5	17	0.8%
Belmont	0203020	Ladd Hill MHP	5												5	0.2%
Belmont	0203040	Pine Gardens MHP									0.25				0.25	0.0%
Bennington	0212010	South Face Condos									0.5				0.5	0.0%
Bridgewater	0298030	Wagon Wheel Condo						1.5							1.5	0.1%
Bridgewater	0297020	Whip-O-Will Condos				5	8		1.5	5	2.5				22	1.1%
Bristol	0301010	Bristol WW LedgesMHP							4						4	0.2%
Brookline	0328030	Blue Moose Grill		8											8	0.4%
Campton	0342070	Village Pond Condos	16.5												16.5	0.8%
Campton	0342100	Coachman Condos							6.5		1.5				8	0.4%
Campton	0343010	Chesleys MHP								8	3				11	0.5%
Canterbury	0377030	Canterbury Shaker Vill				16									16	0.8%
Ctr Harbor	0397020	Waukegan Golf Course								10	0.75	7.75			18.5	0.9%
Charlestown	0411010	ChtwnWW TwValley Est									12.25	3.75			16	0.8%
Charlestown	0413010	Blueberry Hills											1		1	0.0%
Charlestown	0417010	Camp Good News							8						8	0.4%
Chester	0432030	Chesterbrook HOA						20			2				22	1.1%
Chester	0437020	Wason Pond Comm Ctr			8										8	0.4%
Concord	0506040	NH Audubon Ctr		8											8	0.4%
Conway	0518120	MiesterHut MtCranmore			8										8	0.4%
Deerfield	0598020	Blue Bowl Variety	8		16										24	1.2%
Deering	0603010	Longwoods MHP							9		0.25				9.25	0.4%
Dixville	0637020	Balsam Country Club							8		0.25				8.25	0.4%
Enfield	0753020	Daniels Acres												8	8	0.4%
Epping	0762130	West Epping Water Co.								8	0.5				8.5	0.4%
Epsom	0771010	EpsomVD XmasTree co	4.5	3.5											8	0.4%
Gilford	0882170	Country Village Way									5.5	0.25	2		7.75	0.4%
Gilford	0882180	Brookside Crossing								7	3.25				10.25	0.5%
Gilford	0883050	Lake Breeze MHP									4.25				4.25	0.2%
Goffstown	0911010	Goffstown Village Water				17.5									17.5	0.8%
HamptnFalls	1048100	Hampton falls Deli Barn	8												8	0.4%
Haverhill	1101040	Woodsville W&L PORS	3	8					8	8					27	1.3%
Haverhill	1101050	Mtn Lakes Water Dpt												55.5	55.5	2.7%
Hebron	1117120	Paradise Pt Nature Ctr										2	8		10	0.5%
Hillsborough	1141020	Emerald Lake								5.5	12.75	2.5			20.75	1.0%
Holderness	1167160	Squam Lake Science Ctr	2.75												2.75	0.1%
Holderness	1168010	Cottage Pl Squam Lake				10									10	0.5%
Holderness	1169010	Plymouth Elks						9.5			0.75				10.25	0.5%
Hollis	1179020	Morin's Landscaping									1.5	5	2	2.25	10.75	0.5%
Hopkinton	1193020	Elm Brook Vill MHP			8										8	0.4%
Hudson	1201010	HudWD/ Otamic MHP				8									8	0.4%
Kingston	1277030	Camp Lincoln YMCA					8				0.75				8.75	0.4%
Kingston	1278160	KVM									0.25				0.25	0.0%
Kingston	1279030	Kingston Veterans Club						7							7	0.3%
Laconia	1281020	Laconia Correct Facility				1.5				5					6.5	0.3%
Lee	1333020	Pine Knoll Village MHP						14.5							14.5	0.7%
Lee	1338070	Come and Go Express						6.5			0.5	0.25			7.25	0.4%
Littleton	1367010	LISBON KOA	8									7			15	0.7%
Londonderry	1392300	Southview Condos					8.5	1			1.5				11	0.5%
Londonderry	1393050	Wagon Wheel Co-op								8.5	9	0.75	0.5		18.75	0.9%
Londonderry	1397020	LondonderryCountryClub								6	4				10	0.5%
Loudon	1403040	Lazy Pines MHP		8											8	0.4%
Madison	1461010	Eidelweiss Village Dist									11	4			15	0.7%
Meredith	1521010	Meredith Water Dept.			8										8	0.4%
Meredith	1522010	Patrician Shores										26.25	3.5	2	31.75	1.5%

FY08 TECHNICAL ASSISTANCE CONTRACT - GRANITE STATE RURAL WATER

			BACTERIA + LEAK DETECTION TECHNICAL ASSISTANCE HOURS													% of total
TOWN	EPA #	SYSTEM NAME	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL	
Meredith	1522090	Grouse Point Club								8.5					8.5	0.5%
Meredith	1523010	Interlakes MHP						4.5	1			0.25			5.75	0.3%
Moultonboro	1613010	LongIsland Bridge Camp											11.5		11.5	0.6%
Moultonboro	1618310	Jo Jo's Country Store	6												6	0.3%
Newbury	1657010	The Fells		8.5						8					16.5	0.8%
New Durham	1677070	Birch Hill Campgrnd									6.5				6.5	0.3%
New Durham	1678050	New Durham Gen Store		8											8	0.4%
New Ipswich	1713010	Vallaincourt MHP									9.5	1.25		13	23.75	1.2%
New London	1721010	New London-Springfield										0.5	0.5		1	0.0%
Newport	1747020	Crows Nest Campgrd								9					9	0.4%
Newton	1752030	Packers Meadows									0.25				0.25	0.0%
Northmbrlnd	1781010	Groveton Water District								2.5					2.5	0.1%
Northwood	1798170	Susty's Café		8.5											8.5	0.4%
Orford	1835010	Rivendell Interstate Sch		8											8	0.4%
Orford	1838020	Bunten Farm Kitchen										8.5			8.5	0.4%
Ossipee	1847020	Beaver Hollow Campgrd	4.5							2					6.5	0.3%
Pelham	1859050	Amer Legion Post 100	8												8	0.4%
Piermont	1885010	Piermont Village Sch			24										24	1.2%
Pittsburg	1907020	Lake Francis State Pk									0.5	13.25	5.5		19.25	0.9%
Plaistow	1932020	Golden Hill Estates							8		1.5				9.5	0.5%
Plymouth	1941010	Plymouth WW PORS						6.5		5.5	2				14	0.7%
Plymouth	1942010	Tenney Brook II				8									8	0.4%
Portsmouth	1951010	Portsm Bunker Lane MHP										14.75	0.5		15.25	0.7%
Portsmouth	1951020	Pease Trade Port											2		2	0.1%
Raymond	1973020	Lamprey River Coop				8									8	0.4%
Rochester	2003020	Rochester Terrace MHP				15									15	0.8%
Rochester	2003030	Paradise Estates								0.5					0.5	0.0%
Rochester	2003080	Silver Bell MHP	8.5								0.25		4.5		13.25	0.6%
Rochester	2007030	Baxter Lake Rec									11.25	2	1		14.25	0.7%
Salem	2055020	Merrimk Valley Montessori												8.5	8.5	0.4%
Salem	2057080	Camp Otter	8						21.5			0.75	9.25	9.75	49.25	2.4%
Stratham	2232110	Turnberry Condos					5.5				1.5				7	0.3%
Stratham	2232140	Jewett Hill HOA		8											8	0.4%
Swanzey	2303010	Pine Grove MHP									0.25				0.25	0.0%
Tamworth	2317110	Tamworth Campground											2	13	15	0.7%
Thornton	2342110	Millsbrook Village			8						17.0	1.25	2		29.25	1.4%
Westmorelnd	2498060	Pudgies Plain Good Food									0.5				0.5	0.0%
Winchester	2533020	Green Valley											1.5		1.5	0.1%
Windham	2548080	Manor Motel											5.75	3	8.75	0.4%
Wolfeboro	2561010	Wolfeboro Water&Sewer			8										8	0.4%
Count	101	Total Hours	161.75	171.5	169.0	186.0	170.0	180.5	136.5	176.0	171.25	184.0	172	186.5	2,065	100%
		Invoice Amount \$\$	6,187	7,449	7,385	6,617	6,613	6,064	7,243	6,583	8,326	7,000	7,815	8,193	85,474	

TECHNICAL ASSISTANCE CONTRACT - NORTHEAST ENGINEERING, PLLC

Contract Term: Feb 07 to Jun 08				2007												2008												TOTAL	%
TOWN	EPA #	SYSTEM NAME	Assistance Type	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN									
		General TA / Admin					4	4			4	4	4		2						22	3.1%							
		GWR disinfection cost study													2	7	7	28		6	50	7.0%							
		CapDev Meetings w/DES		3	2	4	14		3		1		4		4	4	4		2		43	6.0%							
Allenstown	0043040	Catamount MHP																			2	0.3%							
Alstead	0053010	Well Hill COOP	Funding, Mn				4	8	9												21	2.9%							
Alton	0063020	Merrymeeting MHP	Pb/Cu, PH rehab										1	0.5							1.5	0.2%							
Alton	0063030	Mountain View Park	PH sig def cleanup	1.5	2	5															8.5	1.2%							
Barrington	0153030	Barrington Oaks	BacT (declined)				2	1													3	0.4%							
Bartlett	0162070	Linderhof Golf Course	SS sig def – PH			19	14														33	4.6%							
Bartlett	0162130	Rolling Ridge	SRF (declined)				4														4	0.6%							
Bartlett	0162270	Nordic Village	GWDR study												1	4					5	0.7%							
Bartlett	0162410	Stilling Grant	GWDR study												1	4					5	0.7%							
Bath	0171010	Bath Village WW	SS sig def - low P	1.5	7																8.5	1.2%							
Bedford	0198060	Hill Brook Motel	GWDR study												1						1	0.1%							
Campton	0342010	Beebe River	Disinfection								3	14	1	1	4						23	3.2%							
Canaan	0351010	Canaan Water Dept	DBPs	2.5	10																12.5	1.7%							
Carroll	0382010	Rosebrook / Bretton Woods	Pb/Cu								1	1	1								3	0.4%							
Chester	0437020	Wason Pond Comm Ctr	GWDR + BacT												5						5	0.7%							
Conway	0512120	Saco River Forest	Uranium	1	8	0.5		4			2	1	2		3	0.5	2	15	20		59	8.2%							
Conway	0512250	Saco Woods	Uranium								15	2	8	1	2	0.5	2	2	42		74.5	10.4%							
Conway	0512260	Davis Hill	Uranium	1	14	3.5	8	7	11	4	11	2	3	1	1	1	1	1	2	1	72.5	10.1%							
Conway	0516020	Northern Human Services	Pb/Cu								1	1	6								8	1.1%							
Deerfield	0598020	Blue Bowl Variety	GWDR + BacT												10	4	1				15	2.1%							
Francestown	0831010	Francestown Village WD	Low press (declined)												1						1	0.1%							
Gilford	0882010	Chalet Village	Security (declined)	1.5	2																3.5	0.5%							
Gilford	0883010	Old Lakeshore Coop MHP	Security grant										5								5	0.7%							
Haverhill	1101030	Pike Village District	PWS status									1	1	8							10	1.4%							
Hooksett	1181020	Hooksett Village WP	GWDR study												5						5	0.7%							
Litchfield	1373030	Olson MHP	SS sig def (decl)									1	4								5	0.7%							
Londonderry	1393050	Wagon Wheels	Disinfection + swp												1	4	1				6	0.8%							
New Durham	1672020	Copple Crown Vill Dist	AO uranium + bacT					18	11	2	2	1	1	26	2	11	2				76	10.6%							
Pelham	1852060	RRC Highland Apts	IC – Uranium	6		6	3														15	2.1%							
Pelham	1856010	Pelham Plaza Corp	IC – Uranium				1														1	0.1%							
Pelham	1856040	Victory Supermarket	IC – Uranium				1														1	0.1%							
Pelham	1859050	American Legion Post 100	BacT					11													11	1.5%							
Pembroke	1861010	Pembroke Water Works	GWDR study												1	4					5	0.7%							
Rindge	1993010	Monadnock Tenants Coop	Security grant				3				5										8	1.1%							
Rochester	2003080	Silver Bell MHP	BacT/alt well (dec)				1														1	0.1%							
Stewartstown	2191020	W Stewartstown Water	Cu, BacT	1	15	12	4	2													34	4.8%							
Surry	2281010	Surry Village Water Co	Pb/Cu				3					8	4	0.5	3						18.5	2.6%							
Unity	2384010	Sullivan County Home	Well controls	2.5	10		8	8	1												29.5	4.1%							
PWS Count	28		MONTHLY TOTALS	21.5	70	50	74	63	35	6	45	36	45	38	49	44	20	46	66	7	715.5	100.0%							
			MONTHLY INVOICE (\$)	1,290	4,200	3,000	4,440	3,780	2,100	360	2,700	2,160	2,700	2,280	2,940	2,400	1,200	2,760	3,960	420	\$42,690	TOTAL							